# WPF puZZLE GP 2017 COMPETITION BOOKLET 

## Host Country: Bulgaria

## Author: Deyan Razsadov

Special Notes: No special notes for this round.

## B1. Cave (77 points)

Shade some cells to leave behind a single orthogonally-connected group - the cave - with no shaded cells enclosed within the cave. In other words, all shaded cells must be connected edge-wise by other shaded cells to an edge of the grid. All numbered cells must be a part of the cave (and therefore not shaded). Each number indicates the total count of cells connected in line vertically and horizontally to the numbered cell including the cell itself.

Answer: For each designated row, enter the length in cells of each of the cave segments (not the shaded cells outside the cave) from left to right. Use only the last digit for two digit numbers; e.g., use ' 0 ' for a segment of length 10 . If there are no cells belonging to the cave in the row, enter a single digit ' 0 '.

Example Answer: 22,4


## B2. Cave (57 points)

Answer: For each designated row, enter the length in cells of each of the cave segments (not the shaded cells outside the cave) from left to right. Use only the last digit for two digit numbers; e.g., use ' 0 ' for a segment of length 10 . If there are no cells belonging to the cave in the row, enter a single digit ' 0 '.

Example Answer: 22,4

| $\rightarrow 2$ |
| :--- |
| 2 |

2b


## B3-4. Tents (56, 114 points)

Place tents into the empty cells in the grid, at most one tent per cell. Tents may not be in adjacent cells, not even diagonally. There must be the same number of tents and trees. The tents and trees must match up in such a way that each tent is orthogonally adjacent to its own tree. (It is permissible for a tree to be adjacent to a tent that matches with another tree.)

Some rows and columns may be numbered. A number indicates the number of tents that must be in that row or column.

The numbers on top of the diagram are for Answer purposes only.

Answer: For each row from top to bottom, enter the number of the first column from the left where a tent appears (the number on top of that column). If no tents are in the row, enter a single digit ' 0 '. Use only the last digit for two-digit numbers; e.g., use ' 0 ' if the first tent appears in column 10.

Example Answer: 201025


3

$\begin{array}{lllllllllll}4 & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 0\end{array}$


## B5-6. Star Battle (38, 114 points)

Place stars into some cells in the grid, no more than one star per cell. Each row, each column, and each outlined region must contain exactly two stars. Cells with stars may not touch each other, not even diagonally.

The numbers on top of the diagram are for Answer purposes only.

Answer: For each row from top to bottom, enter the number of the first column from the left where a star appears (the number on top of that column). Use only the last digit for two-digit numbers; e.g., use '0' if the first star appears in column 10.

Example Answer: 261627135



## B7. Rain Clouds (74 points)

Locate some clouds in the grid. Each cloud occupies a rectangular (possibly square) area of cells of at least 2 rows and of at least 2 columns. Clouds do not touch each other, not even diagonally. The numbers on the right and bottom edges of the grid reveal the number of cells occupied by cloud segments in that row or column.

The numbers on top of the diagram are for Answer purposes only.
Answer: For each row from top to bottom, enter the number of the first column from the left
 where part of a cloud appears (the number on top of that row). Use only the last digit for two digit numbers; e.g., use ' 0 ' for column 10. If the row is empty, enter a single digit ' 0 '.

Example Answer: 111511
$\begin{array}{llllllllllll}7 & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 0\end{array}$


## B8. Rain Clouds (117 points)

Answer: For each row from top to bottom, enter the number of the first column from the left where part of a cloud appears (the number on top of that row). Use only the last digit for two digit numbers; e.g., use ' 0 ' for column 10 . If the row is empty, enter a single digit ' 0 '.


